Ed Brown Custom, Inc.

P.O. Box 492, Perry, MO 63462 - (573)-565-3261 - FAX (573)565-2791
Internet Address: www.edbrown.com email: edbrown@edbrown.com

Ed Brown M702 Rifle Owner's Manual

WARNING: YOU MUST READ AND FOLLOW THESE INSTRUCTIONS BEFORE USING THIS FIREARM!
This firearm is a dangerous weapon, and it is potentially LETHAL. Improper or careless handling could cause an accidental discharge, leading to injury, death or property damage.

Introduction

This manual contains important information on safety, handling, lubrication, recommended ammunition, and barrel break-in procedures of your Ed Brown M702 rifle. This is a custom made firearm intended for experienced users. Your safety, as well as the safety of others depends on your constant use of safe firearm handling practices. Seek further assistance if you are unfamiliar with firearms, or unsure of your ability to handle this firearm safely in any way. Safe handling courses are run by local gun clubs, approved NRA instructors and similar qualified organizations.

Disclaimer of Liability

Ed Brown Custom, Inc. will not be responsible for injury, death, or property damage resulting from either intentional or unintentional discharge of this firearm. Ed Brown Custom, Inc. will not be responsible for this firearm's function when used for purposes or subjected to treatment for which it was not designed. Ed Brown Custom, Inc. will not honor claims involving this firearm which result from careless or improper handling, unapproved alteration or parts replacement, corrosion, neglect, the use of incorrect caliber ammunition, the use of ammunition other than an original high grade commercially manufactured ammunition in good condition, or any combination thereof. Ed Brown Custom, Inc., will not acknowledge claims involving this firearm for any reason or cause when such claims are made by the second or subsequent owner, or any other person or organization.

Before this firearm left Ed Brown Custom, Inc., it was carefully inspected, tested and packaged. Ed Brown Custom, Inc. cannot be responsible for product handling after it leaves the factory, therefore, please examine the firearm carefully at the time of purchase to insure that it is unloaded and undamaged. This is your responsibility. The dealer can assist you in making this examination and answer any further questions you may have. If you have specific questions concerning the state of the firearm when it left the factory, call Ed Brown Custom, Inc. immediately.

Keep this instruction manual with your firearm at all times. It should be transferred with the firearm upon change of ownership.

We hope you enjoy your Ed Brown Custom firearm, **safely**. Read this manual and follow the instructions for your safety and the safety of others.

Safe Handling Procedures

1. Always keep the firearm pointed in a safe direction.
2. Handle every firearm as if it were loaded.
3. Always check to be certain the firearm is unloaded - never take anyone's word for it.
4. Always keep and carry your firearm empty except when you are ready to shoot.
5. Do not drink alcoholic beverages or take drugs before, or during, any shooting activity. Your vision and judgement may be seriously impaired, making your firearm handling unsafe. If you are taking medication, seek a doctor's advice to assure that you are fit to shoot and handle firearms safely.
6. Before shooting, make sure your backstop is acceptable to stop and contain bullets. This is to ensure that you do not hit anything outside the shooting area.
7. To reduce the chances of an accident, place a knowledgeable and responsible person in charge to maintain safety control when a group is firing on a range. Always obey his or her commands.
8. Always wear and encourage others to wear ear protection when shooting, particularly on a range. Long-term, permanent hearing loss could be the result without hearing protection.
9. Always wear and encourage others to wear protective shooting glasses for the eyes.
10. Always make sure your firearm is clean. The barrel bore, chamber and action should be clean and free from obstructions. Clean a fouled firearm immediately so that it will function correctly and safely.
11. Use only clean, dry, original, high grade commercially manufactured ammunition in good condition, appropriate to the caliber of your firearm.
12. Always carry your firearm open and empty while on a range until preparing to fire. Keep it pointed toward the backstop when loading, firing and unloading to eliminate the risk of injury, death or property damage.
13. Always keep yourself and others clear of the ejection port. Injuries can occur because spent cartridges are ejected with force, and they are hot. The ejection port must be unobstructed to insure safe ejection of live rounds. Never place your fingers in the ejection

port, they could be burned by hot metal and/or powder, or injured by the bolt moving forward.
15. Never put your finger inside the trigger guard or squeeze the trigger until you are aiming at a target and ready to shoot. This will prevent your from firing the firearm accidentally.
16. Always be sure of your target and the area behind it before you pull the trigger. A bullet can travel through or past your target up to 5 miles before it stops!
17. If your firearm fails to fire, **keep it pointed towards the target or a safe open area** and **wait at least 30 seconds**. If it is a hangfire (slow ignition) the round will fire within 30 seconds. **Although it is very rare, you need to be aware of and prepared for this possibility.** If the round does not fire eject the round and examine the primer. If the firing pin indent is light or non-existent, have the firearm examined by a professional gunsmith. If the firing pin indent on the primer appears normal, assume faulty ammunition and separate the misfired round from all other live ammunition and empty cases. Make certain the bore is clear by removing the bolt and looking through it. Dispose of misfired rounds in accordance with the ammunition manufacturer's instructions.
18. Never use your firearm if it fails to function properly. Never force a jammed bolt because a round may explode causing serious injury or death, and severe damage to your firearm. Before each shooting session, and before loading, give the firearm a quick safety check and visual inspection. If you find something that seems incorrect, do not load or fire. Ask a professional gunsmith for help, or call Ed Brown Custom, Inc. for specific questions.
19. Never shoot at a hard surface such as a rock or liquid surface such as water. The bullet could ricochet, hitting you, another person or unidentified object, causing injury, death or property damage.
20. Never fire your firearm near an animal that is not trained to accept the noise. It could startle the animal, causing injury or an accident.
21. Horseplay should be forbidden while holding a firearm. It could accidentally discharge, causing injury, death or property damage.
22. Never follow a companion with your firearm cocked ready to fire as you could slip and fall, losing control of the firearm. When hunting, hold your firearm so that you can always control the direction of the muzzle, in case of an accidental discharge.
23. Never leave a loaded firearm unattended. Someone may accidentally fire it, causing injury, death or property damage.
24. Always make sure the firearm is unloaded before cleaning, storing, or traveling. All ammunition should be removed with the action open before laying it down or handing it to another person, so that it cannot be fired accidentally.
25. **Always store your firearm and ammunition in separate, locked containers, out of the reach and sight of children, or anyone else who should not handle the firearm.**
26. Always instruct children to respect firearms. If you teach your children to shoot, teach them to treat and use firearms properly. Always supervise them closely and stress safety to prevent injury, death and property damage.

SAFETY FEATURES

Three Position Safety

Refer to Figure 1. The safety catch has three positions
1. Firing position - the safety is fully engaged to the front (toward the muzzle). The firearm is ready to fire in this position. **Never move the safety to the fire position unless the muzzle is pointed in a safe direction.**
2. Middle position - the safety is perpendicular to the bolt. This position locks the firing pin, but the bolt may be opened. This way an unfired cartridge can be unloaded while the safety remains on.
3. Fully on position - the safety is fully engaged to the rear (toward the recoil pad). Both the firing pin and bolt are locked.

OPERATING

Loading

Be sure you have the correct ammunition. Barrels are marked with the correct caliber. Lift the bolt handle and pull it all the way back. Insert a cartridge into the magazine and press it down until it snaps in the magazine. Note that single shot action do not have a magazine - in this case simply lay the cartridge in the action. Close the bolt by pushing it forward and then locking it down. If your firearm has capacity for more than one round, press each cartridge down with your thumb until it snaps in the magazine. Continue this process until the magazine is loaded to capacity, and then close the bolt.

Unloading

CAUTION: Always unload your firearm immediately after use and prior to cleaning and storage to minimize the risk of accidental discharge. To unload your firearm, unlock the bolt by lifting it up, and then pull it straight back to eject the cartridge. Then remove the magazine, if any, or release the magazine cover allowing the remaining cartridges in the magazine to fall out of the firearm.

Firing

CAUTION: Always wear and encourage others to wear ear and eye protection when shooting.
Load the firearm as previously described. If your firearm fails to fire, **keep it pointed towards the target or a safe open area** and **wait at least 30 seconds**. If it is a hangfire (slow ignition) the round will fire within 30 seconds. **Although it is very rare, you need to be aware of and prepared for this possibility.** If the round does not fire, eject the round and examine the primer. If the firing pin indent is light, off center, or non-existent, have the firearm examined by a professional gunsmith. If the firing pin indent on the primer appears normal, assume faulty ammunition, separate the misfired round from other live ammunition and empty cases, reload and carry on firing. Dispose of misfired rounds in accordance with the ammunition manufacturer's instructions.
CAUTION: Keep firearm pointing in a safe direction, and unload as previously described. If you cock your firearm but do not fire it,

apply the safety until ready to fire. If you lose the opportunity to fire, unload your pistol as previously described. Remember, if a round is in the chamber, there is a risk of accidental discharge. Never leave a firearm cocked and ready to fire. The fire condition is very dangerous and the firearm could easily be accidentally discharged, causing injury, death or property damage.
WARNING: When a round is in the chamber, the firearm may accidentally discharge if it is dropped or handled in a way that it was not designed, regardless of the position of any of the safety devices. Do not put a round in the chamber until the firearm is in your hand and you are ready to fire the firearm. Clear the firearm immediately after shooting. We do not recommend carrying this firearm with a cartridge in the chamber. **Remember that ALL safeties on this firearm are mechanical devices and they CAN FAIL. YOU SHOULD NEVER DEPEND ON A SAFETY DEVICE**. Instead, depend upon **safe firearm handling procedures**, many of which are described in this manual.

Removing the bolt
Lift the bolt (unlock it) and pull it straight back. Depress the bolt stop on the left side of the action (muzzle pointing away from you), and remove the bolt.

Maintenance
Keep all metal parts of your rifle clean and well oiled. This is particularly important in adverse climates and conditions. Rust represents neglect, and rust in the barrel and/or chamber can cause excess pressures resulting in serious injury. Any parts showing evidence of rust or other signs of serious wear should be replaced. Replacement parts are available from Ed Brown Custom. To ensure lifelong accuracy, always clean the barrel thoroughly after each shooting session to remove all traces of copper.

Summary of Rifle Barrel Break-in Instructions
1. Fire one round and clean. Do this ten times. 10 rounds fired. **(We have already done this step for you during initial testing)**
2. Fire three or four rounds and clean. Do this five times. 25-30 total. Many clients like to fire one round to foul the bore, then shoot a group of three while developing loads. Then clean and repeat.
3. Fire five or six rounds and clean. Do this five times. 25-30 rounds fired this step. At least 50 total. This step does not have to be done the first day. In fact, it may be done over a period of months. A good idea here is to shoot a fouler round, then shoot two groups of three.
The important idea here is to just clean a new barrel frequently, until it gets about 50 rounds through it. If you do, then you will have the most accuracy that particular barrel is capable of, and a barrel that will foul less, and last longer.

Complete Barrel Break-in Instructions
Proper barrel break-in and cleaning habits have more than a lot to do with the ultimate accuracy the gun is capable of. Barrel break-in is absolutely essential to the ultimate accuracy the gun is capable of.

Make certain the barrel is clean and free of oil by pushing a clean patch through. Then head out to the range with the new gun, some quality ammo, the cleaning rod, plenty of patches, and a bottle of bore solvent. I happen to like Barnes CR-10, it works quickly and does a great job. A cleaning rag is will come in handy, as will a gun rack like the one MTM makes.

Don't use junk ammo. Use the good stuff because you can immediately begin developing loads, or finding the best factory ammo for your gun. All barrels are different, and only by trying different loads will you learn which your barrel likes best.

Shoot one round through and one round only. Then clean the barrel. My favorite procedure is to run the rod through the barrel from the breech, and let the jag just stick out from the muzzle.

I like the Dewey stainless steel rods and the wrap around type Parker Hale brass jags. Dewey and Pro-Shot both make good rods. The Dewey plastic coated rods are nice too. I don't recommend the brass or aluminum rods for other than occasional cleaning. This is heavy duty cleaning, so use a heat treated stainless steel rod, with a swivel handle. If you really want to be professional, use a bore guide to keep the rod completely away from the rifling just ahead of the chamber.

Wrap a patch around the jag sticking out of the muzzle, saturate with solvent, and PULL it back through, but don't let it come completely out the chamber. Then stroke it back and fourth several times. The purpose here is to merely wet the bore with the solvent and remove some of the powder fouling that is covering up the copper fouling.

Then push the jag back out the muzzle and you will likely see that it is black with powder fouling. Now change patches, and saturate the new one with fresh bore solvent. Now stroke this new patch several times and your new inspection will probably find that the patch is blue showing that it has chemically melted the copper fouling present from only one bullet.

Next, repeat this step with a fresh patch and solvent, and keep repeating this routine until the patch doesn't show any blue or black color. Then run one more dry patch through to prepare the bore for the second shot. Fire a second shot and repeat the cleaning procedure. This cycle should be repeated for ten rounds. That's right. Fire only one shot and clean, and do this ten times.

WE HAVE ALREADY FIRED THE FIRST 10 ROUNDS FOR YOU DURING OUR ROUTINE TEST FIRING AND INSPECTION.

The next step is to fire three rounds and clean again, and repeat this cycle five times until you have used up fifteen rounds. Total rounds fired now is twenty five. MANY BARRELS ARE READY TO GO AT THIS POINT. Exercise care, and clean after every five rounds for the next 25 rounds or so, but this can be done during the life of the gun. NO NEED TO SHOOT ALL THESE THE FIRST DAY - JUST CLEAN FREQUENTLY UNTIL THE BARREL HAS AT LEAST 50 ROUNDS THROUGH IT.

BLUE BARRELS WILL RUST IF LEFT UNPROTECTED. PROTECT THE BORE WITH A LIGHT FILM OF HOPPES 9 SOLVENT OR A LIGHT OIL PRIOR TO STORAGE.

About bronze brushes. Most high performance copper removing solvents will quickly eat up bronze brushes too. One could use nylon brushes to eliminate this problem, but I don't use brushes at all, preferring instead to stick to patches and chemically remove the copper fouling.

About solvents. My personal favorite is Barnes CR-10 because it's so fast. I also use Hoppe's Bench Rest and Hoppe's 9 for storage.

NEVER MIX SOLVENTS! You can get into real trouble here. For instance, a mixture of Barnes CR10 and Shooters Choice Copper Remover could etch a bore in less than ten minutes! Either one used by itself is safe for all bores, but mixed together, they can ruin a barrel.

Any high performance copper remover will destroy the rust preventative qualities of any oil you might have in the bore. Always follow up a cleaning procedure with oil prior to gun storage. I even oil my stainless steel barrels. For storage, I use Hoppe's 9. It contains kerosene, so protects against rust like oil. Another bonus, it will slowly eat away copper, leaving a green residue which will be apparent the next time you run a clean patch through the bore.

Don't worry about barrel life. A quality barrel well cared for will deliver top accuracy for several thousand rounds if chambered for a mild cartridge like a 308 or 30/06. Of course very hot cartridges like the 7mm STW will show throat erosion in as little as 250 rounds, but the gun will still provide more than adequate hunting accuracy.

Replacing the barrel on your rifle is one of the least expensive, and easiest accomplished jobs we do.

I have found that in well cared for barrels, the accuracy keeps getting better up to 100 to 200 rounds or more. Then it will stay for a considerable number of rounds in the milder calibers, and then very slowly degrade with throat erosion. This happens much sooner with the very large capacity cartridges. The exact number of rounds is impossible to predict with all the variables present. Obviously, the more powder one burns in a barrel, and the hotter it gets, the sooner it will erode. Keep your barrels clean and cool for longest life.

Additional copies of this manual are available free of charge at www.edbrown.com

Any questions or concerns about the information in this owner's manual should be addressed to:

Ed Brown Custom, Inc
43825 Muldrow Trail
PO Box 492
Perry, MO 63462
573-565-3261
edbrown@edbrown.com